



# A STUDY ON RELATIONSHIP BETWEEN TEACHING COMPETENCY AND MULTIPLE INTELLIGENCE OF TRAINING COLLEGE TEACHERS

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## ABSTRACT

The present study seeks to measure the relationship between teaching competency and multiple intelligence of training college teachers. The Teaching Competency Scale (TCSTCT) and multiple intelligence scale (MISTCT) for training college teachers constructed and validated by the investigator have been used to collect the data from the sample of 400 training college teachers working in Cuddalore, Nagapattinam, Villupuram, Perambalur, and Thanjavur district of Tamilnadu, India. The normative survey method has been adopted and the stratified random sampling technique was used in administration of the research tools. The findings of the study revealed that there is a significant and positive relationship between teaching competency and multiple intelligence. Only 14.7% of the total variance in teaching competency is attributed by the multiple intelligence of training college teachers.

**KEY WORDS:** Teaching competency, Multiple intelligence, Training college teachers.

## INTRODUCTION

In the 21<sup>st</sup> century the aim of education changes very quickly depending on the demands and these demands directly affect educational system. Teachers are directly responsible for operating educational system so that they require strong and efficient educational competencies especially in teaching. Teaching competencies defined as "an incorporated set of personal characteristics, knowledge, skills and attitudes that are needed for effective performance in various teaching environments" (Tigelaar; Dolmans; Wolfhagen & Van der Vleuten, 2004: 255). According to theory of Harvard Gardner, human intelligence has different components and all these components are present in all individuals in different proportions. Some components may be more prominent in individuals. Gardner believe that each individual possess ten intelligences.

## NEED AND IMPORTANCE OF THE STUDY

Teachers are the torch bearers for knowledgeable society and national integration. They not only bring the knowledge but also create and disseminate new knowledge for the benefit of future India. Teaching is not only conveying the subject matters but also inculcate the social values. Particularly Training college teachers should carefully mould the future teachers with all development by their effective teaching competency. The preparation of such an important functionary must conceivably get the major priority. Teachers are expected to use the best practices and strategies to meet challenging demands of their career. Training college teachers who are playing the key role in educating prospective teachers. If they possess effective teaching competency they can produce well equipped teachers. Teaching competency is not a single factor, but many variables influence on them. Now a days to create interest in learning among students is important one. For that teachers have to understand students' nature and use variety of teaching methods in the classroom. This is possible when teachers use their multiple intelligences. Multiple intelligence is a wide view of intelligence. Particularly in recent years multiple intelligences more influencing on teaching competency. Hence the researcher felt that to study what extent the multiple intelligences influence the teaching competency of training college teachers.

## OBJECTIVES OF THE STUDY

- To find out whether there is any significant relationship between multiple intelligence and teaching competency of training college teachers.
- To find out whether there is any significant contribution of different dimensions of multiple intelligences on the dependent variable teaching competency of training college teachers.

## METHOD OF STUDY

The normative survey method was adopted in this study. The Teaching Competency Scale (TCSTCT) and multiple intelligence scale (MISTCT) for training college teachers constructed and standardized by the investigators was used to collect the data from the sample of 400 training college teachers working in Cuddalore, Nagapattinam, Villupuram, Perambalur, and Thanjavur district of Tamilnadu, India. In which 23 D.T.Ed and 34 B.Ed colleges are included in this study. The stratified random sampling technique was used in administration of the research tools. For the data analysis purpose the Correlation and Regression analysis are used.

## Relationship between different dimensions of multiple intelligence and teaching competency of training college teachers

The coefficient of correlation has been found out to determine the relationship between multiple intelligences and Teaching competency of training college teachers. The result of the correlation analysis is given in Table-1.

**Table 1 : Correlation between teaching competency and different dimensions of multiple intelligence**

Multiple Intelligence	Teaching Competency
Verbal-Linguistic Intelligence	0.224**
Logical-Mathematical Intelligence	0.257**
Visual-Spatial Intelligence	0.302**
Bodily-Kinesthetic Intelligence	0.285**
Musical-Rhythmic Intelligence	0.102*
Interpersonal Intelligence	0.289**
Intrapersonal Intelligence	0.135**
Naturalistic Intelligence	0.187**
Spiritual Intelligence	0.119*
Existential Intelligence	0.130**
Total multiple intelligence	0.301**

Note : \*significant at 0.05 level

\*\*significant at 0.01 level

The table -1 shows that there is a significant and positive relationship between teaching competency and all the dimensions of multiple intelligence. Except Musical-Rhythmic and Spiritual intelligence all other intelligence are correlated with teaching competency at 0.01 level. The correlation coefficient value of total multiple intelligence is 0.301 which indicates positive significant relationship between multiple intelligence and teaching competency at 0.01 level.

## Regression analysis for different dimensions of multiple intelligences and Teaching competency of training college teachers

The regression analysis has been carried out to find out whether there is any significant contribution of different dimensions of multiple intelligences on the dependent variable teaching competency of training college teachers. The result of the analysis is presented in table 2 to 4.

**Table 2: Contribution of different dimensions of multiple intelligence on Teaching Competency**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.383	0.147	0.125	16.618

- Predictors:** (constant) Verbal-linguistic, Logical-mathematical, Visual-spatial, Bodily Kinesthetic, Musical-Rhythmic, Interpersonal, Intrapersonal, Naturalistic, Spiritual and Existential intelligence.
- Dependent Variable:** Teaching competency

Table – 2 shows that the R square value, which is found to be 0.147. It is evident that 14.7% of the total variance in teaching competency is attributed by the multiple intelligence of training college teachers. The remaining percentage of variance 85.3 % (1-R Square) is to be accounted by other factors which are not included in this study.

**Table 3: ANOVA for contribution of different dimensions of multiple intelligence on Teaching competency**

Model	Sum of Squares	df	Mean Square	F	Significance
Regression	18509.832	10	1850.983	6.702	0.00
Residual	107428.105	389	276.165		
Total	125937.937	399	-		

a. **Predictors:** (constant) Verbal-linguistic, Logical-mathematical, Visual-spatial, Bodily kinesthetic, Musical-rhythmic and Interpersonal

b. **Dependent Variable:** Teaching competency

It is evident from table-3, the F value is found to be 6.702, which is significant at 0.01 level. It indicates that there is a significant contribution of different dimensions of multiple intelligences on the dependent variable teaching competency of training college teachers.

**Table 4: 't' value of contribution of Different Dimensions of multiple intelligence on Teaching competency**

Model	Unstandardized Coefficients		Standardized Coefficients	't' value	Level of Significance
	B	Std. Error	Beta		
Constant	204.972	10.426	-	19.660	0.000
Verbal-Linguistic	0.527	0.525	0.059	1.004	0.316
Logic-Mathematical	1.145	0.561	0.131	2.041	0.042
Visual-Spatial	1.520	0.549	0.182	2.768	0.006
Bodily-Kinesthetic	1.122	0.536	0.140	2.095	0.037
Musical-Rhythmic	-1.006	0.506	-0.114	1.989	0.047
Interpersonal	0.851	0.546	0.111	1.558	0.120
Intrapersonal	-1.114	0.559	-0.124	1.995	0.047
Naturalistic	0.204	0.489	0.025	0.416	0.677
Spiritual	-0.211	0.422	-0.027	0.500	0.618
Existential	0.000	0.533	0.000	0.000	1.000

From the analysis, the following regression equation has been found  

$$Y = 0.527X_1 + 1.145X_2 + 1.520X_3 + 1.122X_4 - 1.006X_5 + 0.851X_6 - 1.114X_7 + 0.204X_8 - 0.211X_9 + 0.000X_{10}$$

Using this equation it was interpreted that for every unit increase Verbal-Linguistic scores, there is increase in teaching competency score by 0.527. For every unit increase Logical-Mathematical scores, there is increase in teaching competency score by 1.145. For every unit increase visual-Spatial scores, there is increase in teaching competency score by 1.520, for every unit increase Bodily-Kinesthetic scores, there is increase in teaching competency score by 1.122, for every unit increase Interpersonal scores, there is increase in teaching competency score by 0.851, for every unit increase Naturalistic intelligence scores, there is increase in teaching competency score by 0.204

For every unit increase Musical-Rhythmic scores, there is decrease in teaching competency score by -1.006. For every unit increase Intrapersonal scores, there is decrease in teaching competency score by -1.114. For every unit increase spiritual intelligence scores, there is decrease in teaching competency score by -0.211.

Table-4 shows the calculated 't' value, which reveals that the Logical-mathematical (t=2.041), Visual-Spatial (t=2.768), Bodily kinesthetic (t=2.095), Musical-Rhythmic (t=1.989) and Intrapersonal (t=1.995) are significantly contributed to the teaching competency. The negative beta value shows that Musical-Rhythmic (-0.114), Intrapersonal (-0.124) and Spiritual (-0.027) contributed negatively to teaching competency. Hence, it is evident that Musical-Rhythmic, Intrapersonal and Spiritual intelligence reduces the teaching competency. Moreover, Verbal-Linguistic, Interpersonal, Naturalistic, Spiritual and Existential intelligence are not significantly contributed to the dependent variable teaching competency of training college teachers.

## FINDINGS

- There is a significant and positive relationship between teaching competency and multiple intelligences.
- It is evident that 14.7% of the total variance in Teaching Competency is attributed by the multiple intelligence of training college teachers.
- There is a significant contribution of the independent variable such as Logical-Mathematical, Visual-Spatial, Bodily kinaesthetic, Musical-Rhythmic and Intrapersonal intelligence on the dependent variable Teaching competency.
- There is no significant contribution of the independent variable Verbal-Linguistic, Interpersonal, Naturalistic, Spiritual and Existential intelligence on the dependent variable teaching competency of training college teachers.

## CONCLUSION

From this study the investigator concluded and identified that multiple intelligence is also one of the significant contributors of the teaching competency. Hence training college teachers have to use the multiple intelligences in their teaching to enhance the students learning.

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